

REMARKS

Reconsideration of the above referenced application in view of the enclosed argument is requested. Claims 1, 12, 23 and 29 have been amended. Claims 24-28 and 30-31 have been cancelled. Claims 1-23, 29, 32-33 remain in the application.

ARGUMENT

Claims 6-11, 17-22, 32 and 33 are rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicatn regards as the invention.

As to independent claims 6, 17, and 32, the Examiner objects to the use of the term "channel." Specifically, the Examiner thinks it is unclear whether the term "channel" refers to a broadcast station (i.e., TV channel) or an authorized means transmitting the content. The Specification is very clear in supporting the use of the term "channel" as a distribution channel or transmission channel. That is, the channel is some general communications mechanism for communicating the digital content from the broadcaster or content distributor to the viewer's receiving device. In one embodiment, the transmission channel may be over the Internet using a broadband technology. In other embodiments, it may comprise a satellite link, or a local area network linking a plurality of computers. This meaning is well understood by those skilled in the art.

This meaning is supported in the Specification at page 4, lines 28-29 ("undo a masking or obfuscation operation previously performed anywhere upstream of the receiver in the *distribution* channel"); page 5, line 15 ("*transmission systems and channels*"); page 8, lines 27-28 ("encrypted masked content may be transmitted substantially concurrently across a *distribution channel* to arrive at an end-user's receiver to be rendered."); page 8, line 31 to page 9, line 6 (referring to two types of distribution channels – untrusted and trusted); page 9, lines 12-13 ("transmission

channels may be tiered or layered in a hierarchy of any number of levels...”). Indeed, in claim 32 itself, the term “*transmission* channel” is clearly recited. It is apparent from these passages from the Specification, as well as a reading of the Specification as a whole, that the term “channel” is consistently used to refer to a distribution channel, and NOT a broadcast station (typically thought of as a TV channel, e.g., ABC, NBC, etc.). The claims must be read in light of the Specification. Therefore, the meaning of the claim term “channel” is definite, and this rejection must be withdrawn.

As to independent claims 6, 17, and 32, the Examiner objects to the use of the term “distributor.” However, this term is NOT used anywhere in these claims. Therefore, this rejection is wholly without foundation and must be withdrawn.

Claims 1-5, 12-16, 23, 25, 26, 28, 30, and 31 are rejected under 35 USC 102(b) as being anticipated by Aras, et al. (US Pat. No. 5,757,417).

Aras ‘417 discloses an interactive TV program distribution system that allows a viewer’s receiving device (e.g., cable or satellite TV set top box, PC, etc.) to filter content according to prescribed settings when the received audio visual materials (AVM) include tags indicating objectionable content. In contrast, in the present invention, and as is currently claimed in amended claim 1, the masking of selected portions of the content to obfuscate such portions of content is performed by a *content provider prior to* sending the “content after mask applied” data to the receiver, when the receiver is not trusted. That is, the masking is applied by an entity other than the viewer’s receiving device (i.e., the entity may be a content provider). This is apparent from claim 1 since the application of the mask is done before the sending of the masked content from the content provider to the receiver. Aras does not teach or suggest that an entity “upstream” in the content distribution system from the receiver applies the mask to the selected content as currently claimed (in the present invention, the masking can be done by any upstream entity (e.g., content provider) in a hierarchical content distribution system). Claim 1 clearly recites steps taken by an entity other than the viewer’s receiving device (as taught by Aras). Therefore, Aras does not teach or suggest the claimed limitation.

Furthermore, there is no determination of trust in a receiver in Aras. Claim 1 requires one action when the receiver is trusted and another action when the receiver is not trusted. The Examiner cites to col. 7, line 64 through col. 8, line 54 of Aras as teaching the determination of trust. Aras discloses that a PIN can be used to ensure that an unauthorized person at the site of the viewer's receiving device cannot change the masking settings in the receiving device (i.e., set top box). However, the cited text teaches nothing about a distribution entity (content provider) determining whether a viewer's receiving device is trusted as claimed. The set top box of Aras will perform whatever masking is set up according to the SCCs. Aras does not teach or suggest that a distribution entity upstream in the content distribution hierarchy determines the trust of the receiver. Therefore, claim 1 is allowable on this basis, since the cited 102(b) prior art does not teach all of the claim limitations.

For at least the two reasons cited, independent claim 1 is allowable as well as all claims dependent therefrom. Similarly, amended independent claim 12 is also allowable, as well as all claims dependent therefrom.

With respect to independent claim 23, this claim has been amended to more particularly recite the present invention. In Aras, all masking or filtering of content is done in the viewer's receiving device. Aras does not teach or suggest a system having a content provider including a content censor to identify regions of content to obfuscate; and a mask generator to accept the content and regions and produce a mask to apply to the content to obfuscate the identified regions; wherein the mask generator links the content with the regions, generates a mask, applies the mask to the content to produce content after mask applied data and masked content, and encrypts the masked content, and a distributor to transmit the content after mask applied data to a receiver. Therefore, independent claim 23 is now allowable, as well as remaining dependent claim 29. Claims 24-28 and 30-31 have been cancelled.

Claims 6-11, 17-22, 24, 27, 29, 32, and 33 are rejected under 35 USC 103(a) as being unpatentable over Aras in view of over Wool (US Pat. No. 6,373,948).

As to independent claim 6, the Office action cites Aras at col. 5, lines 1-51 as disclosing the claimed limitation of determining if a channel for distributing the content is trusted. The cited text does not in fact teach or suggest the claimed limitation at all. Aras discloses that a receiving device may have a PIN to protect against an unauthorized person from changing the filter settings on the receiving device. There is no disclosure or suggestion in Aras of checking whether a distribution channel for the content is trusted (that is, is the distribution channel secure? Can high value content be pirated during transmission?). The claimed limitation is definitely not taught or suggested by the cited Aras reference. Thus, the Examiner's position with regard to this claim limitation is without basis, and the rejection of the claim must be withdrawn. On this basis alone, independent claim 6, and all claims dependent therefrom (claims 7-11) are allowable. Similarly, independent claim 17, and all claims dependent therefrom (claims 18-22) are allowable.

The Examiner cites Wool as purportedly disclosing many of the limitations of claim 6. Wool describes a system for providing restricted access to packages of TV programs, typically in a cable TV system. In Wool, cryptographic techniques are used to control access by a viewer to only selected subsets of programs or programming packages (i.e., to allow access only to those programs/channels registered for or paid for by the viewer). Previously, the Examiner sought to apply Wool as teaching the claimed limitation "applying the mask to the digital content to generate content after mask applied data." In the latest Office action, no mention is made of this claimed limitation (there is no reference to the prior art where this limitation is to be found). Regardless, Wool uses a mask as a filter only as a technique for determining which specific TV programs are part of certain programming packages (See col. 10, lines 13-25 of Wool) in order to allow the viewer's receiving device to determine the appropriate decryption key, and thus gain access to the desired TV program. Wool's mask is applied by the receiver to the programming stream to determine if the receiver is authorized to display the entire TV program being received. Wool does not teach or suggest that masks can be applied to the content itself (i.e., the TV program) to modify portions of the content

(as currently claimed and described in the Specification at page 7, lines 3-19). That is, Wool does not teach or suggest that a mask can be applied to frames of a TV program to obfuscate selected portions of those frames so a viewer cannot perceive the selected portions of the frames when the program is rendered for the viewer by a receiving device (e.g., a set top box or TV). Wool's use of a mask is entirely different than the claimed invention. Wool does not teach or suggest such obfuscation using masks as is currently claimed and described in the Specification.

The meaning of the recited term "content after mask applied" data is clearly defined in the Specification. See page 6, lines 16-20 ("Second, the content may be transmitted with a mask already applied to it to generate "content after mask applied" (CAMA) data. This modified content may have had objectionable or sensitive data or information masked so that the objectionable or sensitive data or information cannot be perceived by the end-user.") This term is specifically recited in the claimed limitation. It is fundamental that an Applicant can be his or her own lexicographer. The CAMA data is selected content after it has been masked in such a way as to have certain portions obfuscated. This concept is clearly not taught or suggested by Wool, since masking in Wool merely refers to masking program identifiers in a topic hierarchy for identifying selected programs that have been purchased by the viewer as part of a cable TV marketing package. Thus, Wool does not teach or suggest the claimed limitation.

Further, it is clear that in Wool the program identifier masking is performed at the receiver. However, in the present invention, the masking of selected program content is performed upstream in the content distribution hierarchy by a distributor, not at the receiver. This is evident from the limitation in claim 6 wherein the content after mask applied data is sent to the receiver. Thus, the masking has already been performed (by a content provider or distributor) prior to reception of content by the receiver. Wool does not teach or suggest this concept evident in the limitations of claim 6.

In addition, the claimed limitation "sending the content after mask applied data to the receiver for subsequent rendering of the content after mask applied data when the receiver is not trusted" is not taught or suggested in Wool. Wool only

sends data that is usable to a viewer's receiving device that *is trusted* (i.e., is authenticated as being a device that is allowed to access the content due to the previous registration or paid subscription of the viewer). Wool does not modify the content (program) to obfuscate selected portions of the content to make those portions appear different to the viewer, when rendered, than the original content and then send that masked content to an untrusted receiver. Wool does not teach or suggest that the content is masked in this way (to generate "content after mask applied" data) so that when the content is rendered by the viewer's receiving device, objectionable content is obfuscated. Wool does not teach or suggest that masked content may be sent to a receiver that is *not trusted*, since Wool's receiver is determined to be trusted before any usable content is sent.

Further, the limitation of encrypting the masked content is not taught or suggested. The cited text of Wool merely discloses that the TV program is transmitted as encrypted data to the receiver. In Wool's system, the mask is used to determine access to TV programs by the receiver. That is, the receiver applies the mask to the received data to determine if the receiver is eligible to display the data based on the viewer's subscription. If the viewer is eligible, then the receiver decrypts the encrypted program. In Wool, the *encrypted program* is not masked at all. In the present invention, a distribution entity upstream from the receiver applies the mask to the content (e.g., the TV program) to produce "content after mask applied" data. This masked data is then encrypted and sent to the receiver. These concepts are very different from each other.

The limitation of reversing the masking is not taught or suggested. Wool merely teaches decrypting the encrypted program data and displaying it by the receiver. Wool does not teach or suggest that masked content that has been distributed (as discussed above and in the Specification) may be processed by the receiver to "reverse" the prior masking step performed by a distribution entity. That is, the receiver restores the original content (prior to the masking) when the receiver is trusted. This claimed limitation is very different than merely decrypted encrypted programs.

In addition, Aras does not teach or suggest any of the claim limitations that the Examiner relies on Wool for.

One skilled in the art would not be motivated to combine the two cited references of Wool and Aras because the combination would not result in the claimed invention. The combination does not teach or suggest masking of selected content and distribution of the masked content to downstream entities in a content distribution hierarchy as described in the present Specification and currently claimed. The combination does not teach determining whether the distribution channel is trusted.

In sum, for at least the foregoing reasons, neither Wool nor Aras, either alone or in combination, teach or suggest claim 6 because at least several limitations are not met by the cited art. Therefore, independent claim 6 is allowable as presented.

Similarly, independent claim 17 is also allowable.

Accordingly, the claims dependent from claims 6 and 17 (claims 7-11 and 18-22) are also allowable.

With respect to independent claim 32, at least several limitations are not taught or suggested by the cited art. First, the cited art does not determine the security of the *transmission channel*. Wool teaches that the receiver may only display programs that the viewer is eligible to receive. But Wool does not determine the security of the transmission/distribution channel itself. Neither does Aras. This limitation is not taught or suggested by the combination of Wool and Aras. Yet the Office action cites Aras at col. 4, line 49 to col. 5, line 3 as disclosing this limitation. This is completely incorrect. The Examiner is fundamentally applying Aras improperly here.

Second, the limitation of determining a mode of distribution is not disclosed. The cited text of Aras does not match the claimed limitation.

Third, claim 32 requires that the determination of trust of the transmission channel affects what processing is then done. When the channel is trusted, a first mode of operation is undertaken (as described in Figure 6); when the channel is not trusted, a second mode of operation is undertaken (as described in Figure 7). This concept is specifically recited in claim 32, but is not taught or suggest in the cited

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art. The cited art does not teach or suggest two modes of operation depending on whether it is known that the transmission channel is trusted or not as currently claimed (and as described in the Specification at page 8, line 31 to page 9, line 14).

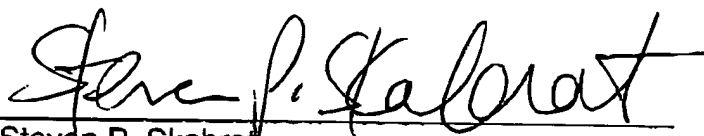
For at least the above reasons, claim 32 is allowable because a prima facie case of obviousness has not been made based on the cited art of Aras and Wool.

Since claim 33 depends from allowable claim 32, it is also allowable.

CONCLUSION

In view of the foregoing, Claims 1-23, 29, and 32-33 are all in condition for allowance. If the Examiner has any questions, the Examiner is invited to contact the undersigned at (503) 264-8074. Early issuance of Notice of Allowance is respectfully requested.

Respectfully submitted,

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